

Lucifer Hummingbird (*Calothorax lucifer*)

NMPIF level: Biodiversity Conservation Concern, Level 1 (BC1)

NMPIF Assessment score: 17

NM stewardship responsibility: Low

National PIF status: Stewardship, Southwest Avifaunal Biome

New Mexico BCRs: 34, (35)

Primary breeding habitat(s): Montane Shrub, Chihuahuan Desert Shrub

Summary of Concern

Lucifer Hummingbird is primarily a Mexican species with a small overall population size and distribution. In New Mexico, small numbers breed regularly only in the Peloncillo Mountains of Hidalgo County.

Associated Species

Black-chinned Hummingbird (SC2), Black-chinned Sparrow (SC1), Canyon Towhee, Scott's Oriole

Distribution

Lucifer Hummingbird breeds primarily in the central plateau of Mexico, from Distrito Federal north to the United States border, and in western foothills of the Sierra Madre Occidental. In the United States, it is most common in the Big Bend and Chisos Mountains region of Texas. It is also present in southern New Mexico and more rarely (a single breeding record) in Arizona (Scott 1994).

In New Mexico, a small breeding population is present in the Peloncillo Mountains, particularly Clanton, Skeleton, and Post Office canyons. The species has also been recorded in Grant, Luna, and Sierra Counties (Hubbard 1989, Parmeter et al. 2002).

Ecology and Habitat Requirements

Lucifer Hummingbird is associated with rocky slopes and Chihuahuan Desert vegetation. It occurs among lechuguilla, ocotillo, sotol, agave, and other plants of upper-elevation Chihuahuan desert scrub. It is

more common on talus slopes and rocky hillsides than in lower-elevation desert scrub habitat. Nest sites are selected on slopes above rocky or wooded washes. In the Chisos Mountains of Texas, two favored nest slopes were steep and composed of slickrock, with no soil, and widely spaced shrubs, 1-2 km from a favored foraging area; other sites included well-vegetated talus. Nests often constructed in cholla, ocotillo, or dead stalks of lechuguilla. In the United States, breeding may extend from early April to August, and two broods may be raised. Important nectar sources in Texas include Havard penstemon, wolly paintbrush and Havard agave (Scott 1994).

Conservation Status

Species Assessment

DISTRIBUTION	5
THREATS	4
GLOBAL POPULATION SIZE	4
LOCAL POPULATION TREND	3
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	17

Lucifer Hummingbird is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a combined score of 17. At the continental level, it receives maximum PIF vulnerability scores of 5 for its small breeding and winter distribution, and 4 for population size. From NMPIF, it receives a score of 4 for threats to breeding in the state. Lucifer Hummingbird is listed as threatened in the state of New Mexico.

Population Size

PIF estimates a species population of 200,000. The New Mexico population probably numbers in the dozens.

Population Trend

No BBS data exist for this species. PIF assigns this species a 2 for population trend, indicating a stable or moderately increasing population. Based on anecdotal information, recent trends in New Mexico have been negative; a local trend score of 3 indicates uncertainty.

Threats

The small state population is vulnerable to disturbance and habitat degradation due to grazing and human activity in the Peloncillo Mountains.

Management Issues and Recommendations

Management options for this species are limited. Attention should be paid to possible impacts of overgrazing in known breeding areas.

NMPIF Recommendations

- Discover, restore or create habitat in igneous rock-based canyons outside of Post Office Canyon.

Species Conservation Objectives

PIF Objectives

The PIF North American Landbird Conservation Plan places Lucifer Hummingbird in the conservation action category Long-Term Planning and Responsibility. It sets a population objective of maintaining the current population over the next 30 years.

NMPIF Objectives

- Maintain or increase the breeding population in the Peloncillo Mountains.

Sources of Information:

Hubbard, J. P. 1989. Summer 1989, southwest region (New Mexico). *Am. Birds* 43:1351-1354.

Parmeter, J., B. Neville, and D. Emkalns. 2002. *New Mexico Bird Finding Guide*. New Mexico Ornithological Society, Albuquerque, NM.

Scott, P. E. 1994. Lucifer Hummingbird (*Calothorax lucifer*). *In* *The Birds of North America*, No. 134 (A. Poole and F. Gill, Eds.). Philadelphia, PA: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.